DOCUMENT RESUME

ED 425 007 PS 027 193

AUTHOR	Banks, Ron; Robertson, Anne S.
TITLE	AskERIC Responds to Parents' Information Needs Using Technology.
PUB DATE	1998-12-00
NOTE	11p.; In: Proceedings of the Families, Technology, and Education Conference (Chicago, IL, October 30-November 1, 1997); see PS 027 175.
PUB TYPE	Reports - Descriptive (141) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	*Access to Information; *Child Rearing; Computer Uses in Education; Educational Resources; Educational Technology; Information Seeking; *Information Services; Information Systems; *Internet; Parenting Skills; *Parents; User Needs (Information); Users (Information); World Wide Web
IDENTIFIERS	*AskERIC; ERIC; *National Parent Information Network

ABSTRACT

In previous generations when parents had a parenting question or concern, they might ask an experienced relative or respected neighbor. However, the transient nature of our society, the changing roles of men and women; and the growing base of knowledge about child development have led parents to look for additional types of resources and support systems. As we move into the 21st century, more parents, and professionals who work with parents, are turning to new technologies to assist them in finding parenting information and support. The Parents AskERIC service uses new technology to meet contemporary parenting education needs. PARENTS AskERIC began in 1993 as an extension of the AskERIC service, which is provided by the ERIC system and administered by the ERIC Clearinghouse on Information and Technology. Parents AskERIC responds to questions from parents and professionals who work with parents by providing access to relevant research and current literature on parenting questions and concerns. The service also provides referrals to current Internet sites and, when appropriate, links parents to relevant organizations or resources within their community. Requests through the Parents AskERIC service have grown by more than 25% during 1997 and continue to increase steadily. As more people become familiar with and have access to the Internet and computer-based services such as Parents AskERIC, the use of this type of technological approach will likely continue to grow.
(Author/LPP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)
X This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

ED 425 007

AskERIC Responds to Parents' Information Needs Using Technology

Ron Banks & Anne S. Robertson ■

Abstract

Parenting during the final years of the 20th century has been a demanding, complex, yet intrinsically rewarding job. In previous generations when parents had a parenting question or concern, they might ask an experienced grandparent, aunt, or respected neighbor. However, the transient nature of our society, the changing roles of men and women, and the growing base of knowledge about child development have led parents to look for additional types of resources and support systems. As we move into the 21st century, more parents, and professionals who work with parents, are turning to new technologies to assist them in finding parenting information and support. The Parents AskERIC service uses new technology to meet contemporary parenting education needs. PARENTS AskERIC began in 1993 as an extension of the AskERIC service, which is provided by the ERIC system and administered by the ERIC Clearinghouse on Information and Technology. Parents AskERIC responds to questions from parents and professionals who work with parents by providing access to relevant research and current literature on parenting questions and concerns. The service also provides referrals to current Internet sites and, when appropriate, links parents to relevant organizations or resources within their community. Requests through the Parents AskERIC service have grown by more than 25% during 1997 and continue to increase steadily. As more people become familiar with and have access to the Internet and computer-based services such as Parents AskERIC, the use of this type of technological approach will likely continue to grow. This paper provides an overview of the Parents AskERIC service and also looks at what kind of assistance is appropriate, and what kind of assistance is not appropriate, to provide to parents through the Internet.

■

Introduction

There are many ways in which parents can obtain information that is helpful to them in raising their children. They can talk to respected authorities such as pediatricians and teachers, engage in informal conversations with friends and relatives, read books and magazines, and view relevant media productions on television or video. With the explosion of information on the Internet and the availability of electronic mail (e-mail) to increasing numbers of parents, receiving parenting information through the Internet has become possible for many parents. This paper discusses the provision of electronic reference and information services to parents through Parents AskERIC, which is a cooperative effort of components of the Educational Resources Information Center (ERIC) system and the National Parent Information Network (NPIN).

NPIN began in 1993 with the Parents AskERIC service and a Gopher site intended to provide parents and professionals who work with parents access to high-quality, research-based materials written for parents. Currently, two ERIC clearinghouses share the NPIN project, the ERIC Clearinghouse on Elementary and Early Childhood Education (ERIC/EECE) and the ERIC Clearinghouse on Urban Education (ERIC/CUE).

Overview of the ERIC System

Mission

According to the most recent *ERIC Annual Report*, the mission of ERIC is as follows:

PS 027193

BEST COPY AVAILABLE

> The mission of the ERIC system is to improve American education by increasing and facilitating the use of educational research and information on practice in the activities of learning, teaching, educational decision making, and research, wherever and whenever these activities take place (Smarte, 1997).

Essentially, the goal is to provide ready access to education-related literature and resources to a wide variety of user groups—from teachers and administrators to college students, faculty, and parents. The expectation is that access to this literature will help to improve the quality of a broad spectrum of education-related services, including early intervention birth-to-3, preschool education, regular and special K–12 education (public and private), higher education, and adult/vocational education.

Organization

The ERIC system began in 1966 and is decentralized in nature, with the bulk of the work done by 16 different subject-specific clearinghouses at different locations in the country (see Figure 1). The system is administered by the U.S. Department of Education's Office of Educational Research and Improvement (OERI).

The ERIC system has hundreds of informal and formal partnerships with other organizations who disseminate information to the education community, and some of the ERIC clearinghouses have especially strong formalized relationships with organizations known as adjunct clearinghouses. For example, the ERIC Clearinghouse on Elementary and Early Childhood Education has forged an adjunct clearinghouse relationship with the National Child Care Information Center (NCCIC). NCCIC provides assistance to ERIC/EECE staff on child care related questions and issues, assists in the acquisition of documents related to child care, and, when appropriate, refers questions from their users to ERIC/EECE. ERIC/EECE maintains the World Wide Web site for NCCIC and collaborates in meetings and publication ventures.

Three support components to the ERIC system—the ERIC Document Reproduction Service (which provides the full text of ERIC documents to users in microfiche, paper, and electronic formats), the ERIC Processing and Reference Facility (which administers and maintains the ERIC database), and ACCESS ERIC (which is the publicity arm of the ERIC system) support clearinghouse efforts, create the ERIC database, and provide document delivery for ERIC documents.

ERIC Clearinghouses

- Adult, Career, and Vocational Education
- Assessment and Evaluation
- Community Colleges
- Counseling and Student Services
- Disabilities and Gifted Education
- Educational Management
- Elementary and Early Childhood Education
- Higher Education
- Information and Technology
- Languages and Linguistics
- Reading, English, and Communication
- Rural Education and Small Schools
- Science, Mathematics, and Environmental Education
- Social Studies/Social Science Education
- Teaching and Teacher Education
- Urban Education

Adjunct ERIC Clearinghouses

- Child Care
- Clinical Schools
- Consumer Education
- Educational Opportunity
- Entrepreneurship Education
- ESL Literacy Education
- International Civic Education
- Law-Related Education
- Service Learning
- Test Collection
- U.S.–Japan Studies

Affiliate Clearinghouse

- Educational Facilities

ERIC Support Components

- ACCESS ERIC
- ERIC Document Reproduction Service (EDRS)
- ERIC Processing and Reference Facility

Figure 1. ERIC system components.

ERIC Clearinghouse Functions

Each clearinghouse provides a number of products and services, including acquisitions and database building, publications, Internet services, and user services.

Database Building. The ERIC database is composed of citations and abstracts or annotations to the education-related literature. The system as a whole currently indexes and abstracts journal articles from over 900 education-related journals. The database is also composed of ERIC documents that represent a wide variety of materials—from curriculum guides to project reports, student dissertations, books, and book chapters. About 13,000 citations to ERIC documents and 20,000 journal citations are added to the database each year. The ERIC database currently contains over 900,000 records from 1966 to the present. To accomplish database-building functions, each clearinghouse acquires materials, selects those that meet ERIC system criteria, and prepares database records for journal articles and documents.

Publications. Each clearinghouse produces approximately 12 full-text ERIC Digests yearly. ERIC Digests are two- to four-page reviews of the literature and position papers on a wide variety of education-related topics and currently represent the only full-text component of the database. Major publications are also published yearly (books and monographs), focusing on topics of particular relevance to the subject specialty of the clearinghouse. Other publications such as newsletters, resource lists, and subject bibliographies are also developed by ERIC publications staff at each clearinghouse.

Internet Services. Each ERIC clearinghouse has developed and maintains an Internet site on the World Wide Web, and Internet-based services have very quickly become an extremely important method of service provision for the ERIC system as whole. Clearinghouse Internet sites typically contain online versions of ERIC Digests and newsletters, as well as a wide variety of material devoted to the subject specialty of the clearinghouse—including some materials produced outside the ERIC system. For example, ERIC/EECE has collections of resources related to the Reggio Emilia approach to early childhood education, the Project Approach, and school readiness (ReadyWeb), in addition to links to other early childhood/elementary/middle school sites. The system as a whole sponsors 26 listservs, or electronic discussion groups, with over 20,000 subscribers. Two of the clearinghouses provide users with Internet-based access to searching the ERIC database, and the ERIC Clearinghouse on Assessment and Evaluation (in conjunction with the Educational Testing Service) provides users with the Test Locator Service, which allows users to access citations, abstracts, and publisher information for a large number of education-related tests, screening tools, and other measurement tools. Each clearinghouse provides access to a variety of informational resources related to their subject scope.

User Services. Each clearinghouse has staff who provide reference services to ERIC users to help them access the ERIC collection and find information related to their areas of interest, providing them with information resources and referrals. Requests to staff who provide these services vary from requests for known items (e.g., Digests, products that have been prepackaged to provide information on specific topics) to more complex queries that require customized responses. Examples of these sorts of requests are provided in Figure 2.

ERIC User Services: Overview

There has been a dramatic change in how users contact clearinghouses with requests for information over the past 5 years. In 1992, for the ERIC system as a whole, 56% of the requests were sent through the U.S. mail, 33% through phone calls, and only 4% through e-mail. By 1996, 93% of the requests for information were received through e-mail, with only 3% received through the U.S. mail and 4% through phone calls (Smarte, 1997, p. 5).

These statistics differ somewhat for ERIC/EECE, primarily because the toll-free phone number for NPIN is publicized frequently in publications such as the spring 1997 "Birth to Three" special edition of *Newsweek*, the Kaiser Permanente (a large health maintenance organization in California) patient newsletter, and over 500 American newspapers in the Gannet newspaper chain. Because of this publicity, about 25% of our requests come in through phone calls, and about 70% come in through e-mail. ERIC/EECE and NPIN also use the U.S. mail more frequently than other clearinghouses to send out customized responses, because many of the parents who call do not have access to e-mail.

In 1996, about 25% of the users of the ERIC system who sent requests for information were elementary or secondary teachers; while about 25% were college faculty or students, 26% were from the general public, and only 4% were parents (Smarte,

1997, p. 5). While this breakdown would have been about the same for ERIC/EECE in the early 1990s, these statistics have changed dramatically for ERIC/EECE because of NPIN and the Parents AskERIC service. As can be seen from Table 1, of over 6,100 questions sent to ERIC/EECE from September 1996 through August 1997 that required customized responses, about 31% were from elementary or secondary teachers, but nearly 21% were from parents, making them the second largest user category.

Table 1

Electronic User Services Statistics: September 1996 through August 1997 (6,111 Total Electronic Questions)

User Category	# of Questions	% of Total
Elementary/Secondary Teachers	1,882	30.8
Parents	1,271	20.8
Postsecondary Students	1,251	20.5
Postsecondary Professors and Researchers	659	10.8
Elementary/Secondary Principals and Administrators	390	6.4
Other Professionals	258	4.2
General Public	135	2.2
Elementary/Secondary Librarians	56	0.9
Elementary/Secondary Students	42	0.6
All Others (7 additional categories)	135	2

From June 1997 through September 1997, parents were actually the largest category of users who sent requests for information through e-mail that required customized responses. During this period, about 27% of the requests came from parents, 25% from college students, and 24% from teachers. Although this pattern may be in part because many teachers have 8 to 10 weeks off in the summer and send fewer questions during this time, nonetheless, this period was the first time that parents were the largest user category for ERIC/EECE. Because of the NPIN publicity previously mentioned, parents are the largest category of users who require customized responses through the U.S. mail, with about 67% of these packages of information being sent to parents.

AskERIC

The AskERIC electronic reference service began in 1992 as a special project of the ERIC Clearinghouse on Information and Technology (ERIC/IT). AskERIC provided a way for the ERIC system to take advantage of the new online technologies, enabling user services staff to respond to requests that required customized responses in a more efficient manner through e-mail (Lankes, 1993, 1995; McKee, 1995). A Web site for AskERIC was added in 1993, and the system responded to its 100,000th question in fall 1997. Parents AskERIC was developed as an expansion of the basic AskERIC service in 1993.

Users of the AskERIC service send their questions (see Figure 2 for sample questions) to an e-mail address, which is advertised through brochures and at many places on the Internet (currently the address is *askeric@askeric.org*). Staff members at ERIC/IT respond to over half of the questions, and they forward questions that relate to the clearinghouse subject scope to the subject specialty clearinghouses who participate. The system can handle over 1,000 questions weekly. ERIC/EECE and NPIN receive parenting questions as well as questions that relate to early childhood and elementary education, responding to as many as 150 questions a week as of October 1997.

Responses to Nonparenting-related AskERIC Questions

The vast majority of the questions that arrive at the AskERIC service receive an ERIC database search in reply—typically 10 to 15 citations and abstracts

related to the topic. The service is not intended to provide comprehensive database searching, except for those questions for which there appears to be only a limited amount of information in ERIC (e.g., "What does the research say about the use of fat or large diameter pencils for primary age students?"). Clearinghouses are free to search other databases when appropriate, or if they so choose.

Full-text material from ERIC is sent whenever possible (usually ERIC Digests), but material from other organizations such as the National Association for the Education of Young Children and the National Network for Child Care, whose copyright rules allow distribution of their materials for educational purposes, is also sent. Beginning in fall 1996, user services staff who respond to AskERIC questions also were required to send at least one Internet Web address related to the question. AskERIC users also receive referrals to organizations and agencies (addresses and phone numbers) whenever appropriate.

The AskERIC service has an educational function. Users are provided with the search strategies for the ERIC database, they are told where they can go to obtain the full text of ERIC documents and journal articles, and they are given an Internet site URL where they can find additional resources. Figure 2 lists several AskERIC questions that were received at ERIC/EECE in fall 1997. Examples of parenting questions and discussions of what can and cannot be provided to parents through an electronic reference service such as Parents AskERIC will be presented later in this paper.

Each of the questioners in Figure 2 received a customized response prepared by user services staff at ERIC/EECE. For the first question, which focuses on the issue of inclusion of fifth-graders in a middle school setting, the user was referred to the toll-free telephone number of the National Middle School Association (NMSA), received the full text of an article on this topic that appears on the NMSA Web site, and was sent 10 citations/abstracts from the ERIC database that addressed the issues brought up in the question.

The second and third questions regarding year-round education and ability grouping represent topics that have a large amount of material to choose from in the ERIC database, including full-text Digests. There is a national association for year-round schooling, to which the user was also referred, and other relevant Web sites were also provided.

The issue of ability grouping is frequently discussed on listservs such as MIDDLE-L for middle school teachers and administrators, and in addition to citations, Digests, and Internet sites, the user was referred to the MIDDLE-L archives on the Internet and told how to search for relevant postings.

1. Our community is currently debating building a new middle school and moving the fifth grade, currently in elementary schools, to this new facility. My question is whether there is literature concerning the appropriateness of grouping fifth-graders in a middle school environment.
2. We are researching the possibilities of changing our K–5 school to a year-round school schedule. Any data pro or con would be greatly appreciated.
3. What information can you give me in regards to homogeneous vs. heterogeneous ability grouping of elementary-aged students?
4. My name is Lucy, and I am looking for articles that deal with the effectiveness of the Kids on the Block Puppet program. So far, the only thing I have been able to find is Heidi Tortorella's article, "Teaching Human Diversity in Middle School." I would appreciate any titles or resources that you may suggest. Thanks for your help.
5. Can you tell me the kindergarten entrance ages for each state?

Figure 2. Sample AskERIC information requests.

The Kids on the Block puppet question is a fairly straightforward one; there are about a dozen ERIC citations on this disability awareness program that were provided to the user, along with the Web site address for Kids on the Block, which provides links to puppet troupes in the United States and Canada, information about how to make the puppets, and general program information.

Finally, the question on kindergarten entrance ages for the states represents one for which there is a specific answer (a relatively rare occurrence for education-related questions sent to AskERIC!). The Education Commission of the States maintains and updates this information on its Web site, and the commission allows us to download the file and send it to users, along with their Web address.

Parents AskERIC

The Growth of Parenting Education

Systematic attempts to provide information on parenting skills have been documented from early history to present day. For example, young married women in Victorian times were instructed about parenting by people such as Charlotte Mason (1904) in her book *Parents and Children.* These early books and articles featured tips on thrifty household organization, meal preparation, child rearing, and educational techniques. In the United States during the early 1900s, a "mother's friend" or "friendly visitor" were the names given to home visitors who were part of a program designed to provide support to needy families or widows (Carter, 1996, p. 2). Education, in the form of information on hygiene, nutrition, and child safety, was a key component with early home visiting. Rural women benefited from group meetings provided by the U.S. Department of Agriculture's Extension Service. These meetings, guided by the cooperative extension agent and women from the community, provided courses on various aspects of home management, including child development. For most people, however, parenting support and education were provided through informal networks and extended family members and friends.

In 1946, a book written by Dr. Benjamin Spock, *Baby and Child Care,* was designed to speak directly to parents, and it quickly topped the best-seller list, eventually selling more then 39 million copies (Carter, 1996, p. 3). The huge popularity of this parenting book may have resulted from the growing mobility in American society (which was breaking down some of the informal support systems and pushing parents to seek other resources). Perhaps it was successful because a new generation of young mothers, many of whom had held demanding jobs during the employment shortages of World War II, felt capable of breaking from tradition to seek other solutions to their child-rearing questions. Whatever the reasons, the success of *Baby and Child Care* has, for many, been viewed as a symbolic turning point for the development of a new wave of information and support that responds directly to parents.

Fueled by growth in academic areas relating to child development, psychology, and education, other books and programs quickly followed, including federally funded programs such as Head Start in the 1960s. These social initiatives raised hopes that early childhood education combined with parent education would help break the cycle of poverty for needy families. By the 1970s, there were hundreds of parenting books and community-based programs that had been developed to assist the young or new mother. Hospital maternity wards were frequently the home for classes that provided education on childbirth and newborn baby care.

As parents became more knowledgeable, they wanted useful information about their older children as well, and they began to seek out other experts to answer their questions. Today, there are more than 50,000 parenting programs sponsored by many different groups, including medical professionals, allied health professionals, educators, social workers, extension services, psychologists, and religious organizations (Carter, 1996, p. 4). No longer are parenting education programs considered as aimed at the poor or neediest families. The term "parent education" now encompasses a wide variety of formats, content, and programs (Gorman & Balter, 1997, p. 340). Many parents and people who are working in a parenting capacity, such as step-parents, domestic partners, and foster and adoptive parents, are demanding high-quality information on more effective ways to raise and educate their children. It has become clear that information on parenting education should be accessible to all parents and people who are supporting children and families.

Also during the 1970s, the potential of the mass media and the telephone as influential tools to teach skills for parents emerged. Research by Samuels and Balter (1987) found that the telephone was an effective tool for responding to parents' questions as well as for reassuring them about common concerns. Parents indicated that they liked having someone to talk to who was "unbiased and educated" (Samuels & Balter, 1987, p. 30). Other work by Popkin showed that video clips of interactions between parents and children were useful tools to suggest positive alternatives to parents and that parents enjoyed the multimedia approach (Popkin, 1987, p. viii). The step taken by ERIC to merge technology, information services, and the developing field of parenting education through the NPIN project pioneered a new approach to support parents and professionals who work with parents.

Other noncommercial and commercial parenting Web sites that started during the 1990s included

the National Network for Child Care, CYFERNET, Parentsoup, ParentsPlace, and the Family Education Network. Over the past 3 years, hundreds of new Web sites focusing on parenting issues have emerged, and this trend will likely continue as more people gain Internet access. Although NPIN began with a Web site and the Parents AskERIC service, the NPIN Web site may be the largest nonprofit parenting Web site. The site provides access to a variety of resources and services, including the full text of public domain materials intended for parents and professionals to copy and duplicate for nonprofit use. Many of the full-text resources and *Parent News* articles, as well as the listings of Web sites and organizations, are prepared for the NPIN Web site in direct response to frequently asked parenting questions from the Parents AskERIC service. By using this participatory method, NPIN works to find and develop useful resources for parents and professionals who work with parents.

Responding to a Typical Parents AskERIC Question

Typical topics mentioned in Parents AskERIC questions over the course of a month might look like those in Figure 3. A broad range of issues may be raised over the course of a month, and although the general topics are often similar, the individual question or perspective on the topic is often quite unique. A typical Parents AskERIC question might look like the following:

> *Dear ERIC,*
>
> *I just met with my son's kindergarten teacher, and she told me that she feels that he needs another year to grow. She wants him to repeat kindergarten next year. I don't really understand why, and I haven't told my son yet. I'm so afraid of what this might do to his self-esteem, but I don't want to push him on if he isn't ready. I really want to do the right thing. Please send me any information you have on retention in kindergarten. Anything would be greatly appreciated.*
>
> *Thanks in advance,*
>
> *Louise*

Over the past years, we have learned much about how electronic services such as NPIN can and cannot ethically respond to these and other parenting questions. As we have thought about the kinds of responses that we might provide to questions such as this one, we have developed a graphical representation called the "parenting education spectrum" that helps us identify the range of support that can be supplied to parents through parenting education information services and programs (Figure 4). The spectrum defines services into five major categories. One end of the spectrum falls into the area of information resource and referral, while the opposite end of the spectrum reflects the one-to-one support for parents that is available through home visiting or counseling. In between the two ends of the spectrum are support systems that range from those that are able to supply a few suggestions or strategies to community-based programs intended to support parents generally.

sibling rivalry	parental involvement
toilet training	special needs children
divorce	father involvement
custody issues	home schooling
benchmarks in child development	aggressive behavior
family communication	positive discipline
adolescent behavior	program development
substance abuse	choosing a school
resources for gifted children	family literacy

Figure 3. Parenting question topics.

The spectrum may also help new parenting education programs consider what support is currently being provided within a community, and it can help them discover where there may be gaps in service delivery. Careful consideration of the population that the program is serving and staying within the program's scope is particularly important for electronic parenting education and support services provided by services similar to Parents AskERIC and NPIN.

With access to the ERIC database and the World Wide Web, NPIN has the potential to serve an international population of parents who have Internet access. The toll-free telephone line serves an additional population of people residing within the United States who may not have computer access. NPIN provides a large collection of diverse parenting resources on the Web site and/or refers users to ERIC documents, research, popular

parenting books, or organizations. However, it is difficult to envision how a nationwide electronic service like NPIN could offer the more intensive support that is possible through community programs or counseling. This type of direct service can be provided through community networks where the parent resides, by trained professionals who are sensitive to issues within the community and who can develop a relationship with individual families. Parents AskERIC can also provide support to these community services when the service's information referral resources are used to help callers contact the support networks within their communities.

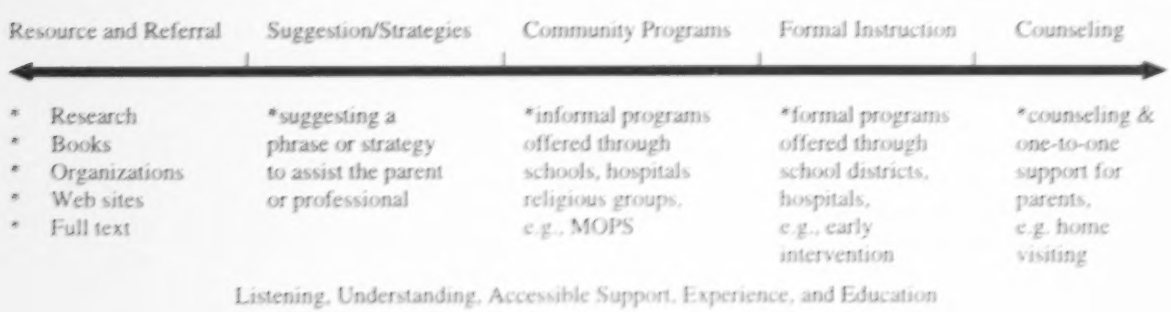
Resource and Referral
Suggestion/Strategies
Community Programs
Formal Instruction
Counseling
* Research
* Books
* Organizations
* Web sites
* Full text
*suggesting a phrase or strategy to assist the parent or professional
*informal programs offered through schools, hospitals religious groups, e.g., MOPS
*formal programs offered through school districts, hospitals, e.g., early intervention
*counseling & one-to-one support for parents, e.g. home visiting
Listening, Understanding, Accessible Support, Experience, and Education

Figure 4. Parenting education spectrum.

Taking into consideration the AskERIC program's scope and the parenting education spectrum, our typical response to a Parents AskERIC question is very focused. It includes a short narrative that acknowledges the parent's concern, commends the parent for asking the question, and provides background information to inform the parent's decision making, and suggests immediate strategies that can be used by the parent in asking better questions, or a strategy that other parents have found helpful when addressing a similar problem. In addition, the response would likely include useful references to more in-depth information, such as citations from the ERIC database; some suggestions of relevant parenting books, articles, or quotes from experts in the field; reference to organizations or Web sites; and, if possible, information on support services within the caller's community.

As the Parents AskERIC service grows, NPIN will continue to refine the answering techniques. NPIN also plans to study the effectiveness of our answers and thereby gain a deeper understanding of the needs of parents and of ways to facilitate access to parenting support through technology, media, and the community.

Other Issues and Concerns Related to Electronic Reference Services

Issues related to the provision of electronic reference services have received increasing attention in the library and information science literature (Evans, 1992; Kluegel, 1995). Among the issues, concerns, and trends that the literature addresses and that have become evident through the provision of electronic reference services through AskERIC are the following points:

1. In electronic reference service, the give and take that occurs between a patron and a librarian in a reference interview at a traditional library setting is very limited. It is sometimes difficult to clarify what the user meant when the question seems to be vague or could be interpreted in different ways. Some users send their phone numbers, or staff can send an e-mail message asking for clarification, but because of the large volume of questions that are responded to in a given day, these approaches are considered to be too time-consuming to employ as a general rule. Instead, the Parents AskERIC staff at ERIC/EECE will typically send a response based on their "best guess" interpretation of the

question and ask the user to send further questions if necessary.

2. As mentioned earlier, staff at ERIC/EECE and NPIN, and other ERIC clearinghouses as well, respond to a high volume of questions, and staff resources become strained at times. AskERIC questions are expected to be responded to within 48 hours (2 working days). At ERIC/EECE, it has been determined that staff members should respond to three questions every 2 hours—a rate that is not always easy to achieve. Saving files for use with repeat questions (such as the issue of whether twins should be separated in elementary schools) and the resources provided by the AskERIC staff at ERIC/IT are helpful, but the majority of questions are either unique or have some unique aspects that require at least some new effort at searching for information beyond saved files. Time studies and efforts at production improvement continue, especially at peak question load times in the fall and spring.

3. Internet copyright issues are a problem in the preparation of customized responses for delivery through the U.S. mail and are also an issue in electronic reference work. Care must be taken not to download and send copyrighted files to users, giving them instead only the URL Web addresses where the information exists. Given that users like to receive full-text information and that many users may have e-mail but not readily available World Wide Web access, copyright can be a problem even in electronic reference work. Locating high-quality information on the Internet that is in the public domain and working to receive author permission for educational use as needed are important tasks that greatly improve AskERIC service quality.

4. The Internet has clearly made the AskERIC service possible, effective, and valuable, enabling us to respond to a greater variety of questions with useful information. In 1994, the user typically received only an ERIC database search in response to his or her question. Since that time, access to public domain articles from the U.S. Department of Education, other ERIC clearinghouses, and other agencies and organizations who focus on topics of concern to the users have greatly improved the quality of the service.

5. Finally, providing reference services through electronic means can be less reinforcing for staff who prepare the responses than library-based reference work, because the vast majority of users say their "thank you's" in the body of their question and few reply after receiving a response to let AskERIC staff know whether or how the information provided was useful to them. Only 5% to 10% of users send follow-up messages. This lack of feedback points out the need for a periodic, systemwide AskERIC evaluation. A user survey is currently being prepared to assess the effectiveness of PARENTS AskERIC and to ascertain what can be done to improve the service.

References

Carter, Nick. (1996). *See how we grow: A report on the status of parenting education in the U.S.* Philadelphia, PA: Pew Charitable Trusts.

Evans, Anita K. (1992). Electronic reference services: Mediation for the 1990's (with discussion). *Reference Librarian, 37*, 75-90.

Gorman, Jean Cheng, & Balter, Lawrence. (1997). Culturally sensitive parent education: A critical review of quantitative research. *Review of Educational Research, 67*(3), 339-369.

Kluegel, Kathleen M. (1995). Trends in electronic reference services: Opportunities and challenges. In Linda C. Smith & Richard E. Bopp (Eds.), *Reference and Information Services* (pp. 123-151). Englewood, CO: Libraries Unlimited.

Lankes, David R. (1993). AskERIC: The virtual librarian (pilot Internet development and research project). *Information Searcher, 6*(1), 20-22.

Lankes, David R. (1995). AskERIC and the virtual library: Lessons for emerging digital libraries. *Internet Research, 5*(1), 56-63.

Mason, Charlotte. (1904). *Parents and children.* London, England: Kegan, Paul, Trench, Trubner and Co. Ltd. (also published in 1989 by Tyndale House in Wheaton, IL).

McKee, Mary Beth. (1995). A day in the life of a virtual reference librarian: AskERIC information service on the Internet. *School Library Journal, 41*, 30-33.

Popkin, Michael. (1987). *Active parenting: Teaching cooperation, courage, and responsibility.* San Francisco, CA: Harper and Row.

Samuels, J., & Balter, L. (1987). How useful are telephone consultation services for parents? *Children Today 16*(3), 27-30.

Smarte, Lynn. (1997). *ERIC Annual Report 1997: Summarizing the recent accomplishments of the Educational Resources Information Center.* (1997). Rockville, MD: ACCESS ERIC. (ERIC Document Reproduction Service No. ED 411 781)

Additional Resources

Home visiting [Special issue]. (1993). *The Future of Children, 3*(3).

Klass, Carol S. (1996). *Home visiting: Promoting healthy parent and child development.* Baltimore, MD: Brooks Publishing.

Simpson, A. Rae. (1997). *The role of mass media in parenting education.* Cambridge, MA: Center for Health Communication, Harvard School of Public Health.

■